MX6 Cradle Reference Guide

LXE

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Revision Notice

Trademarks	Changed HHP® to Hand Held Products® where applicable. Added Registered mark to RAM® and TM mark to RAM Mount™.
MX6 Cradles	Added section titled "Revision History".
Manuals and Accessories	Removed reference to MX6 PPC manuals as the MX6 with a Pocket PC 2002 operating system is obsolete.
Entire Manual	Updated graphics of equipment that have new LXE 2005 logo.

Archived December 2008

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Introduction

MX6 docking cradles give the MX6 the ability to communicate with a host computer and other devices.

In addition, using external power sources, both cradles charge the Main Battery and the backup battery in the MX6. The desktop docking cradle can charge a spare main battery as well.

The MX6 can be either On or in Suspend mode while in the cradles.

The docking cradles accept all MX6 mobile device versions, with and without handles or handstraps.

Desktop Cradle	**Vehicle Mount Cradle with Tethered Scanner**

Docking and Undocking

If the cradle is not permanently attached to the work or vehicle surface, before inserting or removing the MX6, stabilize the cradle with one hand while inserting or removing the MX6 with the other hand.

The MX6 is inserted into the charging pocket with the keypad facing forward.

Press down until the pins in the charging bay connect with the port in the base of the MX6. The MX6 is held securely in the cradle.

Remove the MX6 from the cradle by pulling it straight up and out of the charging pocket.

Desktop Docking Cradle

> *Note:* *The desktop cradle should have only one type of interface cable connected at a time, either USB or RS-232.*

A complete main battery charge in an MX6 using the docking cradle takes less than four hours.

A spare battery in the Auxiliary Battery bay is completely charged in less than four hours. Simultaneously charging an MX6 in the MX6 bay and an extra battery in the auxiliary battery bay takes less than four hours.

COM port and power cables are available from LXE.

> *Note:* *The "MX6 User's Guide" and "MX6 PPC User's Guide" contain instructions for the MX6 user.*

Quick Start

1. Bolt the desktop cradle to a flat surface. It can be mounted using a DIN rail or a wall mounting bracket.

2. Push the barrel connector into the power jack at the back of the Cradle.

3. If required, connect a 9-pin RS-232 cable to the serial port or a USB cable to the USB port at the back of the Cradle.

4. Plug the three prong connector end of the AC power supply into an AC wall outlet.

5. The desktop cradle is ready for use.

When the desktop cradle is receiving external power, and the MX6 is properly seated in the charging bay, the DOCK LED is green.

If the powered cradle is connected to a host computer using either the RS-232 or USB cable, and ActiveSync 3.7 is installed on the host computer, synchronization begins immediately.

The cradle should be located in an area where it:

- Is not in high traffic areas.

- Has enough clearance to allow easy access to the power and ports on the back of the device.

- Is protected from rain, dust or inclement weather. This device is intended for indoor use only.

Components

Figure 1 Front of Desktop Cradle

1   Dock LED
2   Auxiliary Battery LED
3   Communications LED
4   MX6 Charging Bay
5   Auxiliary Battery Bay

Figure 2 Back of Desktop Cradle

1   USB Port
2   RS-232 Port
3   DC Power Jack
4   Auxiliary Battery Bay

Indicators and LEDs

Label	Color	Explanation
DOCK	Solid Green	MX6 is properly seated in the charging bay and the Main Battery in the MX6 is charging.
AUX Battery	Orange	The spare battery is charging.
	Green	The spare battery has completed charging and is ready for use.
COMM w/serial port	Red	Serial data is being sent to the MX6 from the host.
	Green	Serial data is being sent from the MX6 to the host.
	Orange	Serial data is being sent at high data rates.
COMM w/USB port	Green	USB connection is established with the host. (using ActiveSync)

Note: IrDA transmission from a handheld MX6 to or from a docked MX6 does not require a powered cradle.

See Also: MX6 Reference Guides, Chapter 4 – System Configuration, Sections titled "ActiveSync", "Infrared Receive" and "Beam".

See Also: "Accessories" for LXE certified cables.

Mounting the Desktop Cradle

There are two methods for mounting the desktop cradle – either free-standing or securely fastened to a suitable flat protected surface. LXE recommends a horizontal surface out of the way of accidental knocks, bumps or other shocks to the MX6 and the cradle.

Free-standing Cradle

Note: If the free-standing cradle is to be securely bolted to a flat surface, refer to the section titled "Secured Cradle".

1.   Connect the serial and power cables to the Desktop Cradle.

2.   Connect the power cable to an uninterruptible external power source.

3.   The Desktop Cradle's DOCK LED will not illuminate until the MX6 is properly seated in the charge bay.

4.   The desktop cradle is now ready for use.

Secured Cradle

Wall Mounting
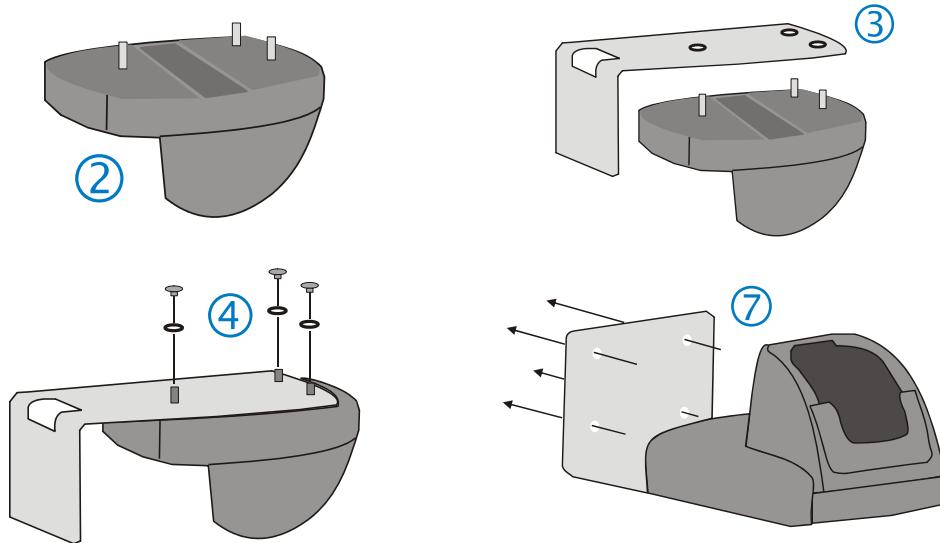
Equipment needed (not supplied by LXE): Hardware required to bolt cradle to the mounting plate and hardware required to bolt cradle to a vertical surface.

1. Turn the cradle over so the bottom of the unit is visible.
2. Secure three screws to the bottom of the unit by sliding them into the available keyhole slots.
3. Match the holes in the bracket to the secured screws in the cradle.
4. Attach the cradle's bottom panel to the mounting bracket using the appropriate washers and bolts.
5. Turn the secured cradle right side up.
6. Locate the mounting holes in the vertical panel.
7. Secure the vertical mounting bracket to the wall.
8. Carefully test the stability of the cradle mounted to the wall bracket.
9. Connect the serial and/or power cables at this time.
10. Connect the AC power cable to an uninterruptible external power source.
11. The desktop cradle is now ready for use.

DIN Rail

The desktop cradle has a DIN rail (7.5 x 35 mm) slot in the bottom of the cradle to allow for secure horizontal attachment.

LXE does not supply the DIN rail or the mechanical hardware required to mount the desktop cradle using a DIN rail.

Attach the Serial or USB Cable

Cables for the Desktop cradles are available in the following configurations:

- RS-232 Cable – 26-pin to DB-9
- USB Cable – USBA to USB

Only one cable can be connected to the desktop cradle at a time – either USB or RS-232.

Connect the DC Power Cable

LXE offers an external power supply for the desktop cradle. Please refer to the Accessories section later in this guide.

The external power supply may be connected to either a 120V, 60Hz supply or, outside North America, to a 230V, 50Hz supply, using the appropriate detachable cord set.

In both cases, connect the external AC supply to a properly grounded source of supply provided with maximum 15 Amp over current protection (10 Amp for 230V circuits).

Insert the barrel connector into the desk top cradle power jack and push in firmly.

Worldwide AC to DC Adapter Specifications

Figure 3 Worldwide AC Power Supply

Input Power Switch	None
Power "ON" Indicator	None
Input Fusing	Thermal Fuse
Input Voltage	108VAC min - 132VAC max
Input Frequency	47 - 63 Hz
Input Connector	North American wall plug, no ground
Output Connector	Barrel connector, female, 5.5 x 2.5 x 11.5mm, Center Positive
Output Voltage	+9.5VDC, regulated
Output Current	0 Amps min, 1.5 Amps max
Operating Temperature	32° F to 104° F / 0° C to 40° C
Storage Temperature	-13° F to 158° F / -25° C to 70° C
Humidity	Operates in a relative humidity of 5 – 95% (non-condensing)

Note: The detachable cordset for the Worldwide Power Supply must be ordered separately.

Battery Charging in the Desktop Cradle

The cradle must be connected to a power source before battery charging can begin.

The MX6 automatically powers on when inserted into a powered cradle. If the screen remains blank, verify the MX6 is firmly seated in the charging pocket and the external power connection is active. If the screen is still blank, perform an MX6 soft reset.

MX6 Main Battery charging status is reflected by the DOCK LED on the cradle. The DOCK LED illuminates green when the MX6 is properly seated in the cradle. The cradle automatically begins charging the main battery in the MX6 when the DOCK LED illuminates.

The power available to charge the batteries in a powered cradle is shared between the MX6 and a spare battery pack (if installed). Charging priority is given to the Main Battery in the MX6.

If both Main Battery packs are fully depleted, the powered cradle charges the MX6 main battery in approximately 3.5 hours and the spare main battery in approximately 4 hours.

When a spare battery is placed in the Battery Charging Slot and there is no MX6 in the cradle, a few seconds will pass before the charging indicator starts to blink.

Technical Specifications – Desktop Cradle

Weight	26.6 oz (754g)
Height	4.0 in (10.2 cm)
Width	5.5 in (14.0 cm)
Length	6.3 in (16.0 cm)
Operating Temperature	14° F to 122° F / -10° C to 50° C
Storage Temperature	-4° F to 158° F / -20° C to 70° C
Humidity	90%

Connectors

USB Port

The USB B male connector supports 12 Mbps communications. A USB A connector is wider and flatter than a USB B connector. The USB port will accept B connectors only. See "Accessories" later in this guide for LXE certified cables for the Desktop docking cradle.

RS-232 Port
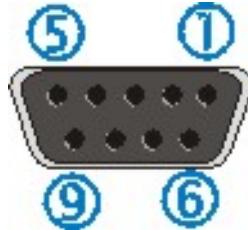
Figure 4 RS-232 DB-9 Female Connector Pinout

Signals are referenced for a DTE device.

Pin	Signal	Description
1		Internal jumper to Pin 6
2	TXD	Transmitted Data - Output
3	RXD	Received Data – Input
4	DSR	Data Set Ready
5	GND	Signal/Power Ground
6	DTR	Data Terminal Ready
7	CTS	Clear To Send
8	RTS	Request to Send
9	RI	Ring Indicator wakes MX6

Vehicle Mount Cradle

This cradle is specifically designed for vehicle mount applications. The cradle restrains the MX6. The vehicle mount docking cradle gives the MX6 the ability to communicate with a host computer and other equipment. In addition, using an external power source, the docking cradle transfers power to the internal charging circuitry of the MX6 and, in turn, the MX6 recharges the Main Battery.

The MX6 can be either On or in Suspend mode while in the docking cradle.

Quick Start

1. Attach the MX6 vehicle cradle to the vehicle mounted bracket assembly.
2. Insert the cigarette lighter end of the power adapter into the vehicle's cigarette lighter outlet.
3. If required, connect an RS-232 cable to the serial port on the back of the Cradle.
4. Attach the MX6 power connector to the Power jack on the bottom of the Cradle.
5. The Vehicle Mount cradle is ready for use.

When the vehicle cradle is receiving external power, and the MX6 is properly seated in the charging bay, the DOCK LED is green.

The vehicle cradle should be mounted in an area in the vehicle where it:

- Does not obstruct the vehicle operator's vision or safe vehicle operation.
- Will be protected from rain or inclement weather.
- Will be protected from extremely high concentrations of dust or wind-blown debris.
- Can be easily accessed by a user seated in the driver's seat.

Battery Charging in the Vehicle Cradle

The cradle must be connected to a power source before MX6 battery charging can begin.

The MX6 automatically powers on when inserted into a powered cradle. If the screen remains blank, verify the MX6 is firmly seated in the charging pocket and the external power connection is active. If the screen is still blank, perform an MX6 soft reset.

The DOCK LED illuminates green when the MX6 is properly seated in the cradle. The cradle automatically begins charging the main battery in the MX6 when the DOCK LED illuminates.

The power available to charge the batteries in a powered cradle is shared between the MX6 and a spare battery pack (if installed). Charging priority is given to the Main Battery in the MX6.

If the Main Battery is fully depleted, the powered vehicle cradle charges the MX6 main battery in approximately 4 hours.

Tethered Scanners and the Vehicle Cradle

Tethered scanners connect to the MX6 communication port or to the communication port on an MX6 vehicle cradle. The MX6 Scan buttons have no effect on tethered barcode scanners (connected to a serial port). Tethered scanners read barcode scans only when the trigger on the tethered scanner is pressed.

An adapter cable is required to attach a tethered scanner directly to the MX6 (MX6A056CBL3IND17D9M) or to the MX6 vehicle cradle (MX6A057CBL3IND9MD9M). See "Accessories".

When using the 8500 series tethered scanners (LS3408), the tethered scanner Power Mode must be set to "Reduced Power Mode". The default is "Continuous On". Setting the scanner to reduced power mode will not impact performance of the 8500 series tethered scanners. Refer to the tethered scanner manufacturers user guide for instruction.

MX6 Setup

To set the MX6 to use a tethered scanner, select **Start | Settings | System | Scanner | COM1**.

Click the "**Tethered scanner on COM 1**" to enable the tethered scanner. Scanner data can be configured for data rate, parity, stop bits and data bits using the COM1 tab.

Perform a warm boot after enabling the tethered scanner to power it on.

Components

1   Latch

2   Locking tabs

3   Spring Arm Assembly

4   RAM™ Ball

5   Turnscrew

6   Mounting Bracket
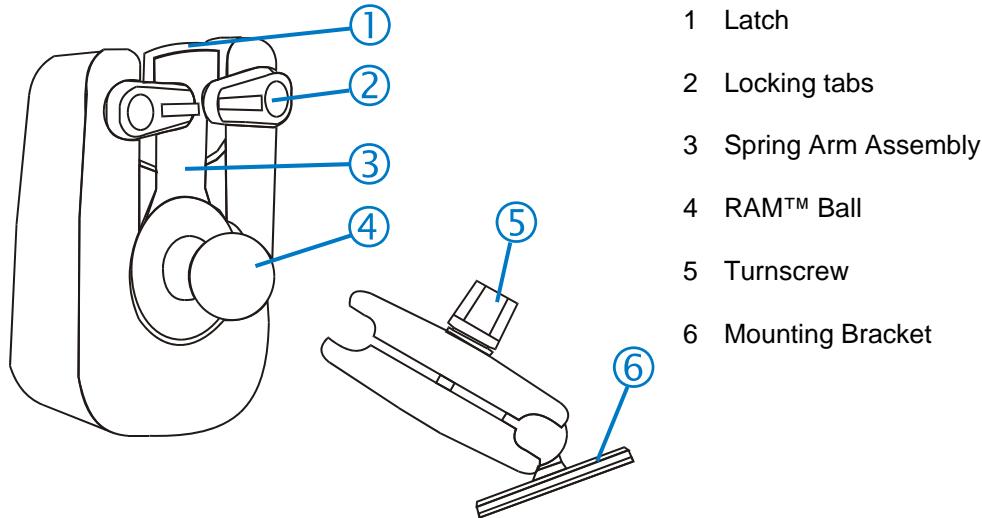
Figure 5 Vehicle Mount Cradle – Back

The MX6 is inserted into the cradle by placing the base of the unit in the charging/communication pocket and then firmly pressing the unit backwards until the latch clicks.

The MX6 is removed from the cradle by pressing either locking tab up, then pulling the MX6 forward and out of the charging/communication pocket.

Either locking tab can be used to release the MX6 from the latches.

Indicators and LEDs

Label	Color	Explanation
DOCK	Solid Green	MX6 is properly seated in the charging bay, and external power source is connected and the Main Battery in the MX6 is automatically charging.
COMM w/serial port	Red	Serial data is being sent to the MX6 from the host.
	Green	Serial data is being sent from the MX6 to the host.
	Orange	Serial data is being sent at high data rates.

Note: IrDA transmission from a handheld MX6 to or from a docked MX6 does not require a powered cradle.

See Also: MX6 (*or MX6 PPC*) Reference Guide, Chapter 4 – System Configuration, Sections titled "ActiveSync", "Infrared Receive" and "Beam".

See Also: "Accessories" for LXE certified cables.

Step 1 : Attach Cradle to Vehicle Mounted Device

Prerequisite: The vehicle must have a bracket mounting device pre-installed and ready to accept the MX6 cradle.

1. There must be at least 2" clearance at the bottom of the vehicle cradle for the cables. Position the bracket to allow access to the ports on the bottom of the Vehicle Mount Cradle.

2. Mount the cradle backplate bracket to the vehicle bracket using four (4) ¼-28 x 1/2" Long PanHead screws, with lock washer and nut (not supplied by LXE).

How To : Suggested Mounting

1. Fasten base with ball to Cradle Back Bracket.

2. Attach base with ball where item is to be mounted on vehicle.

3. Place arm on ball on vehicle by loosening the turnscrew on the arm, then placing the socket over the vehicle mount, then the cradle mount.

4. Tighten the knob on the arm until the cradle is secured to the vehicle.

Periodically test the mounting device and retighten bolts and/or knob as needed.

Step 2 : Connect Power Supply

1. Connect to MX6 Cradle Power port.

2. Connect to Vehicle's cockpit power supply (cigarette lighter).

3. Power On LED illuminates when the cigarette lighter adapter is seated properly in the cigarette lighter receptacle.

4. To relieve possible strain on the cradle power connector, provide mechanical support for the power cable by securing it to the vchicle structure or mounting bracket no more than six inches from the cradle power connector, taking care not to over tighten and pinch conductors or penetrate the outer cable jacket. Ensure that there is some slack in the cable between the connector and mechanical support to prevent pressure from being applied to the power connector.

Vehicle 12-48VDC Direct Connection

**12-48V Vehicle Cradle Power Cable, Bare Wire, 6ft
MX6A386PWRCBL6FT**

To be installed on NEGATIVE and FLOATING GROUND VEHICLES ONLY.

Caution: ⚠️	*For proper and safe installation, the input power cable must be connected to a fused circuit on the vehicle. This fused circuit requires a 3 Amp maximum time delay (slow blow) high interrupting rating fuse or 4 Amp standard. If the supply connection is made directly to the battery, the fuse should be installed in the positive lead within 5 inches of the battery positive (+) terminal.* *For installation by trained service personnel only.*
Warning: ⚠️	*Risk of ignition or explosion. Explosive gas mixture may be vented from vehicle battery. Work only in well ventilated area. Avoid creating arcs and sparks at battery terminals.*

① ③ ②
+
−
④ ⑤

1- To Vehicle Battery
2- To Vehicle Mounted Cradle
3- Red (DC+)
4- Black (DC-)
5- 12 – 48 VDC
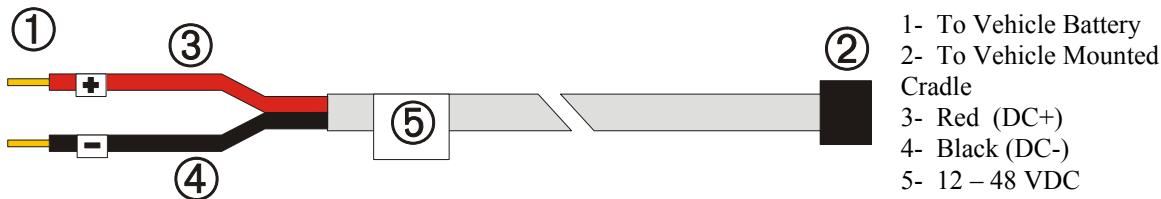
Figure 6 12-48VDC Direct Vehicle Power Connection Cable (Fuse Not Shown)

Note: Correct electrical polarity is required for safe and proper installation. Connecting the cable to the computer with the polarity reversed will cause the computer's fuse to be blown. See the following figure titled "Vehicle Connection Wiring Color Codes" for additional wire color-coding specifics.

How To: Connect Vehicle 12-48VDC Direct Connection

1.   The MX6 must be turned off.

2.   While observing the fuse requirements specified above, connect the power cable as close as possible to the actual battery terminals of the vehicle. When available, always connect to unswitched terminals in vehicle fuse panel, after providing proper fusing.

   ATTENTION: For uninterrupted power, electrical supply connections should not be made at any point after the ignition switch of the vehicle.

3.   Route the cable the shortest way possible. The input cable from the connection to the battery is rated for a maximum temperature of 90°C (194°F). When routing this cable it should be protected from physical damage and from surfaces that might exceed this temperature.

Do not expose the cable to chemicals or oil that may cause the wiring insulation to deteriorate.

Note: If the vehicle is equipped with a panel containing Silicon Controller Rectifiers (SCR's), avoid routing the power cable in close proximity to these devices.

Always route the cable so that it does not interfere with safe operation and maintenance of the vehicle.

Use proper electrical and mechanical fastening means for terminating the cable. Properly sized "crimp" type electrical terminals are an accepted method of termination. Please select electrical connectors sized for use with 18AWG (1mm^2) conductors.

Wiring color codes for LXE supplied DC input power cabling:

Vehicle Supply		Wire Color
+12 - 48VDC	(DC +)	Red
Return	(DC -)	Black

Figure 7 Vehicle Connection Wiring Color Codes

Note: LXE's MX6 accepts a wide DC input voltage range. Do not connect the cradle input power cable to the MX6 or any other LXE device or damage to that device may occur.

4.   Provide mechanical support for the cable by securing it to the vehicle structure at approximately one foot intervals, taking care not to over tighten and pinch conductors or penetrate outer cable jacket.

5.   Insert the power cable into the power jack on the vehicle cradle.

6.   To relieve possible strain on the cradle power connector, provide mechanical support for the power cable by securing it to the vchicle structure or mounting bracket no more than six inches from the cradle power connector, taking care not to over tighten and pinch conductors or penetrate the outer cable jacket. Ensure that there is some slack in the cable between the connector and mechanical support to prevent pressure from being applied to the power connector.

7.   The vehicle cradle is ready for use.

Vehicle Cradle 24-72VDC Input Cable Connection

24-72V Vehicle Cradle Power Supply
Output 12VDC
9000A316PS24V72VMX6

Caution ⚠	*For proper and safe installation, the input power cable must be connected to a fused circuit on the vehicle. This fused circuit requires a 5 Amp maximum time delay (slow blow) fuse. If the supply connection is made directly to the battery, the fuse should be installed in the positive lead within 5 inches of the battery positive (+) terminal.*

1. Power Switch

2. Power On Indicator

3. Output to Vehicle Cradle

4. Input from Vehicle Battery

Figure 8 Vehicle Power Supply, 24 - 72VDC (Fuse Not Shown)

VEHICLE ELECTRICAL SYSTEM

5 AMP SLOW BLOW
FUSE
DC +   BRN OR WHT
DC -   BLU OR BLK
GREEN
VEHICLE CHASSIS
DC-DC CONVERTER
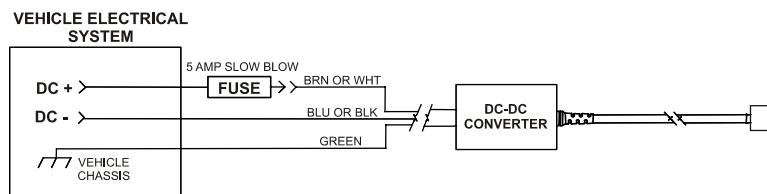
**Figure 9 Connecting the Power Supply to the Vehicle**

Power Supply Dimensions

Length 9.25"

Height 2.5"

Width 4.7"

DIAGRAM IS NOT TO SCALE

Figure 10 Power Supply Footprint

1.   If the mobile device is in the cradle, it can be either On or Off during this process.

2.   Turn the Power Supply toggle switch to the Off position.

3.   While observing the fuse requirements specified above, connect the power cable as close as possible to the actual battery terminals of the vehicle. When available, always connect to unswitched terminals in the vehicle fuse panel, after providing proper fusing.

   IMPORTANT:

   For uninterrupted power, electrical supply connections should not be made at any point after the ignition switch of the vehicle.

4.   Route the cable the shortest way possible. The input cable from the connection to the battery is rated for a maximum temperature of 60°C (140°F). When routing this cable it should be protected from physical damage and from surfaces which might exceed this temperature.

   Additionally do not expose the cable to chemicals or oil that may cause the wiring insulation to deteriorate.

   Note: If the vehicle is equipped with a panel containing Silicon Controlled Rectifiers (SCR's), avoid routing the power cable in close proximity to these devices.

   Always route the cable so that it does not interfere with the operator's safe operation and maintenance of the vehicle.

   Use proper electrical and mechanical fastening means for terminating the cable. Properly sized "crimp" type electrical terminals are an accepted method of termination.

   Wiring color codes for LXE supplied DC input power cabling:

Vehicle Supply		Wire Color
+24-72VDC	(DC +)	Brown or White
Return	(DC -)	Blue or Black
Vehicle Chassis	(GND)	Green

Figure 11 Vehicle Connection Wiring Color Codes

Note: The input power cord for the DC-DC Power Supply uses white, black and green wires. Some LXE products have DC input power cords with brown, blue and green wires. The previous table shows the correct electrical connection for either type of cable.

5.   Provide mechanical support for the cable by securing it to the vehicle structure at approximately one foot intervals, taking care not to overtighten and pinch conductors or penetrate outer cable jacket.

6.   Connect the Power Supply to the cradle by aligning the keyed water tight connector pins to the power connector; push down on the keyed water tight connector and twist it to fasten securely.

7.   Turn the Power Supply on. The ON LED on the Power Supply illuminates when it is receiving power from the vehicle.

8.   The Cradle Status LED illuminates green.

9.   The mobile device CHGR LED illuminates.

Vehicle Power Adapter Fuse Replacement

Caution: **In the case of a bad connection between the cigarette lighter adapter and the vehicle's cigarette lighter receptacle, the metal contacts on the connector can become very hot. It may be possible to burn yourself.**

12V Vehicle Cradle Power Supply, Cig Lighter Adapter. MX6A382PSVEHMT12V

The cigarette lighter adapter uses a 2 Amp fuse that is user accessible and user replaceable. Should it need replacement, replace with same size, rating and type of fuse.

1. Take the MX6 out of the vehicle cradle and disconnect the cigarette lighter adapter from the vehicle cradle.

    Note: If the cigarette lighter adapter is too hot, allow it to cool down before continuing with the replacement instructions that follow.

2. Twist the button end of the cigarette lighter adapter to the right until the fuse is visible and can be removed. Remove the fuse.

3. Discard the fuse and place a new fuse in the holder.

4. Reassemble the button end of the cigarette lighter adapter and twist to the left until finger tight.

5. Reconnect the MX6 power cable to the vehicle cradle.

6. Reconnect the cigarette lighter adapter cable to the cigarette lighter receptacle.

7. Seat the MX6 firmly in the cradle.

Technical Specifications – Vehicle Mount Cradle

Weight	15.0 oz (425g)
Height	6.8 in (17.3 cm)
Width	4.4 in (11.2 cm)
Length	2.7 in (6.9 cm)
Operating Temperature	14° F to 122° F / -10° C to 50° C
Storage Temperature	-4° F to 158° F / -20° C to 70° C
Humidity	90%
Output	12V DC 0-1200mA
Recharging rate	4 hours for main battery pack
Power options	Cigarette lighter adapter for 12 V DC system or direct connect cable for 12 – 48 V DC systems

Connectors
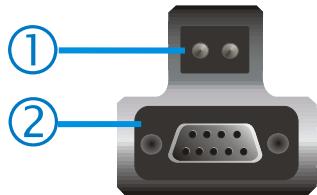
1   Power Supply Connector

2   RS-232 Port

Figure 12 Vehicle Mount Cradle – Connectors on the Base

Power Supply Connector

Requires 12 to 48 V DC source.

See "Accessories" later in this guide for LXE certified cables for the vehicle docking cradle.

RS-232 Port
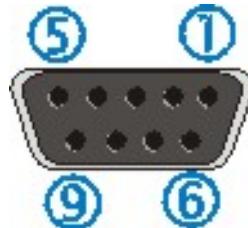
Figure 13 RS-232 DB-9 Female Connector Pinout

Signals are referenced for a DTE device.

Pin	Signal	Description
1		Internal jumper to Pin 6
2	TXD	Transmitted Data - Output
3	RXD	Received Data – Input
4	DSR	Data Set Ready
5	GND	Signal/Power Ground
6	DTR	Data Terminal Ready
7	CTS	Clear To Send
8	RTS	Request to Send
9	Power	+5 VDC controlled and sourced by the MX6

See "Accessories" later in this guide for LXE certified cables for the vehicle docking cradle.

Maintenance

Desktop Cradle

There are no serviceable parts in the desktop cradle. Do not attempt to open the unit.

Vehicle Cradles

Check the vehicle bracket fasteners and re-tighten if necessary. If the vehicle bracket and cradle connections become broken, loose or cracked, it must be taken out of service and replaced. Contact LXE Customer Support (see "Getting Help").

Regularly inspect the vehicle adapter for loose or missing parts. When not using the vehicle charger adapter, disconnect it from the cigarette lighter (or 12V) receptacle.

Getting Help

All LXE guides are now available on one CD and they can also be viewed/downloaded from the LXE ServicePass website. Contact your LXE representative to obtain the LXE Manuals CD.

You can also get help from LXE by calling the telephone numbers listed on the LXE Manuals CD, in the file titled "Contacting LXE". This information is also available on the LXE website.

Explanations of terms and acronyms used in this manual are located in the file titled "LXE Technical Glossary" on the LXE Manuals CD.

Manuals and Accessories

MX6 Reference Guide

MX6 User's Guide

LXEbook – MX6 User's Guide

Vehicle Mount Cradles	
MX6 Vehicle Cradle, for use with a non-handled MX6. Cannot be used with a MX6 with a handle. Supports a D9 Comm connector for RS-232 communication. Includes a RAM Mount™ bracket assembly. Power supply not included.	MX6A007VMCRADLE
MX6 Vehicle Cradle, For use with Handle. Cannot be used with a non-handled MX6. Supports a D9 Comm connector for RS-232 communication. Includes a RAM Universal Mounting bracket. Power supply not included.	MX6A008WHVMCRADLE
12V Vehicle Cradle Power Supply, Cig Lighter Adapter.	MX6A382PSVEHMT12V
12-48V Vehicle Cradle Power Cable, Bare Wire, 6ft	MX6A386PWRCBL6FT

24-72V Vehicle Cradle Power Supply	9000A316PS24V72VMX6
MX6 Vehicle Stand, Plastic Holder for vehicle mounting. For use with a non-handled MX6 only. Cannot be used with a handled MX6. Cannot attach a tethered scanner. Vehicle stand can be mounted to the vehicle's dash and the unit is powered using the Cig Lighter power adapter connected directly to the MX6.	MX6A009VMSTAND
MX6 Cig Lighter Power Adapter, 12V.	MX6A385PSAUTO12V
Desktop Cradles	
MX6 Single Unit Desktop Cradle, USB/RS232, w/ single unit battery charging slot, US. US power cord included. In order to ActiveSync using this cradle, special cables must be ordered. Cradle supports both USB and/or RS232 interface. USB cable MX6A057CBL6USB. RS232 cable MX6A059CBL6RS232	MX6A005DESKCRADLEUS
MX6 Single Unit Desktop Cradle, USB/RS232 w/ single unit battery charging slot, WW. Power cord is not included. A country specific power cord must be purchased separately. In order to ActiveSync using this cradle, special cables must be ordered. Cradle supports both USB and/or RS232 interface. USB cable MX6A057CBL6USB. RS232 cable MX6A059CBL6RS232	MX6A006DESKCRADLEWW
MX6 4-Bay Docking Cradle, US power cord included. Does not include auxiliary charging slot or ActiveSync capability.	MX6A012MULTIDOCKUS
MX6 4-Bay Docking Cradle, WW. Power cord is not included. A country specific power cord must be purchased separately. Does not include auxiliary charging slot or ActiveSync capability.	MX6A013MULTIDOCKWW
MX6 4-Bay Comms Docking Cradle, US (Ethernet Capabilities). Power cord included. Does not include auxiliary charging slot or ActiveSync capability.	MX6A010NETCRADLEUS

MX6 4-Bay Comms Docking Cradle, WW (Ethernet Capabilities). Does not include power cord. A country specific power cord must be purchased separately. Does not include auxiliary charging slot or ActiveSync capability.	MX6A011NETCRADLEWW
Desktop Cradle Wall Mounting Kit	MX6A014WALLMTGKIT
USB Cradle to PC Interface Cable, 6ft	MX6A057CBL6USB
RS-232 Cradle to PC Interface Cable, 6ft	MX6A059CBL6RS232
Interface Cables	
MX6 Vehicle Cradle Scanner/Printer Adapter Cable, D9F to D9M, 7.5". Used in conjunction with the Vehicle Cradle to allow all existing LXE peripheral interface cables (Scanners/Printers) to attach to the MX6 Vehicle Cradle.	MX6A057CBL3IND9MD9M
Charge/Comm Cable Power Supply. Includes US power cable. This power supply facilitates in-unit battery charging and is used in conjunction with the RS232 and USB ActiveSync cables.	MX6A307PSACUS

	MX6A308PSACWW
Charge/Comm Cable Power Supply. Does not includes a power cable. This power supply facilitates in-unit battery charging and is used in conjunction with the RS232 and USB ActiveSync cables.	
Miscellaneous Accessories	
Universal Vehicle Docking Cradle Mounting Bracket – Clamp Style. The MX6 Vehicle Cradle includes a universal RAM Mount bracket. This mounting bracket is an alternative "Clamp Style" mounting bracket designed for customers with no way of mounting the Vehicle Cradle to a vehicle.	MX6A015MTGBRCKT
Replacement US Power Cord.	9000A066CBLPWRAC
Tethered Scanners	
MX6, Scanner adapter cable, 7.5", D17 to D9M. Used in conjunction with the MX6's D17 connector to allow all existing LXE peripheral interface cables (Scanners/Printers) to attach directly to the MX6.	MX6A056CBL3IND17D9M
Adapter cable, 7.5", converts MX6 cradle's D9F connector to a D9M connector. Used in conjunction with the Vehicle Cradle to allow all existing LXE peripheral interface cables (Scanners/Printers) to attach to the MX6 Vehicle Cradle.	MX6A057CBL3IND9MD9M
5300-92 Auto Range Scanner, 7ft D9 Interface Cable	8110IP530092C07DWW
5300-92 Auto Range Scanner, 15ft D9 Interface Cable	8110IP530092C15DUS
P304PRO PDF-417 Scanner, 8ft D9 Interface Cable	8210A326PRO8DA9F
P304PRO PDF-417 Scanner, 20ft D9 Interface Cable	8210A327PRO20DA9F
PowerScan SR Scanner, 8ft D9 Interface Cable	8300A326SCNRPWRSR8DA9F
PowerScan SR Scanner, 12ft D9 Interface Cable	8300A327SCNRPWRSR12DA9F

PowerScan LR Scanner, 8ft D9 Interface Cable	8310A326SCNRPWRLR8DA9F
PowerScan LR Scanner, 12ft D9 Interface Cable	8310A327SCNRPWRLR12DA9F
PowerScan ALR Scanner, 8ft D9 Interface Cable	8320A326SCNRPWRXLR8DA9F
PowerScan ALR Scanner, 12ft D9 Interface Cable	8320A327SCNRPWRXLR12DA9F
5770 RF/Wireless Scanner Kit, ALR, D9 Interface Cable (see Note)	8410A326SCNRALRDA9
LS3408 Fuzzy Logic SR Scanner, 9ft D9 Interface Cable	8510A326SCNRFZYDA9F
LS3408 Extended Range Scanner, 9ft D9 Interface Cable	8520A326SCNRERDA9F

Note: 8410A326SCNRALRDA9 can only be used in conjunction with the MX6 Vehicle Cradle due to base station power consumption.

When using the 8500 series tethered scanners (LS3408), the tethered scanner Power Mode must be set to "Reduced Power Mode". The default is "Continuous On". Setting the scanner to Reduced Power Mode will not impact performance of the 8500 series tethered scanners.

Revision History

Revision A, Initial Release, December 2003

Revision B, March 2005

Cover Page - Added 2005 LXE logo. Updated graphics in main guide.

Vehicle Mount Cradle - Added instruction for Tethered Scanners. Added instruction for securing cradle power cable to vehicle or mounting bracket for cable strain relief. Fuse ampere values corrected.

Manuals and Accessories - Added approved tethered scanners and cables to the Accessories listing. Updated accessories listing, part numbers and pictures.

Revision C, June 2005

Vehicle Mount Cradle - Updated figures and instruction in section titled "Vehicle 12-48VDC Direct Connection" (MX6A386PWRCBL6FT). Added figures and instruction for accessory in section titled "Vehicle Cradle 24/72VDC Input Cable Connection" (9000A316PS24V72VMX6).

Appendix A Regulatory Notices and Safety Information

⚠️ **A/C Power Supply Safety Statement – MX6**
Output Rated 9.5 VDC, 3 A. ⚠️

Optional A/C Power Supply:

Outside North America, this unit is intended for use with an IEC certified ITE power supply with output rated as stated at the top of this page. (US)

Alimentation c.a. optionnelle:

Hors de l'Amérique du Nord, cette unité est conçue pour être utilisée avec une alimentation ITE certifiée CEI de sortie nominale indiquée au haut de cette page. (FR)

Valgfrit vekselstrømforsygning

Udenfor Nord Amerika er denne enhed udstattet med en IEC (international elektronisk Kommission) udfærdiget med en ITE strømforsygning med strømudgang som fastslået på denne sides begyndelse. (DK)

Vaihtoehtoinen vaihtovirran syöttölaite:

Pohjois-Amerikan ulkopuolella tämä laite on tarkoitettu käytettäväksi sellaisen IEC:n sertifioiman ITE-tehonsyöttölaitteen kanssa, jonka antoteho on tämän sivun yläosassa esitetyn mukainen. (FI)

Optionales Netzteil (Wechselstrom)

Außerhalb Nordamerikas sollte diese Einheit über ein der IEC-Norm entsprechendes ITE-Netzteil gespeist werden, und zwar mit einer wie oben auf dieser Seite genannten Ausspeisung. (DE)

Προαιρετική Τροφοδοσία Συνεχούς Ρεύματος

Εκτός Β. Αμερικής, η μονάδα αυτή προορίζεται για χρήση με ένα τροφοδοτικό ITE πιστοποιημένο κατά IEC με ονομαστική ισχύ όπως δηλώνεται στην αρχή της σελίδας. (GR)

Alimentazione opzionale a corrente alternata:

Al di fuori dei paesi dell'America del nord, l'unità deve essere impiegata con un dispositivo d'alimentazione per attrezzature informatiche approvato dalla IEC la cui potenza nominale sia pari a quella indicata all'inizio della pagina. (IT)

Vekselstrømforsyning (ekstrautstyr):

Utenfor Nord-Amerika skal dette produktet brukes med en IEC-sertifisert ITE-strømforsyning med klassifisert effekt som angitt øverst på denne siden. (NO)

Fornecimento opcional de CA:

Fora dos EUA, esta unidade destina-se a ser usada com dispositivos de fornecimento de corrente ITE com certificação IEC, com a capacidade indicada no topo desta página. (PT)

Suministro optativo de corriente alterna

Fuera de América del Norte, esta unidad se debe utilizar con un alimentador ITE homologado por la IEC (comisión electrotécnica internacional) con una salida que tenga la calificación que figura en la parte superior de esta página. (ES)

Valfri A/C Strömförsörjning

Utanför Nordamerika är det meningen att denna enheten används med en IEC-certifierad ITE-strömförsörjare med den uteffekt som anges längst uppe på den här sidan. (SE)

İsteğe Bağlı A/C Güç Kaynağı:

Kuzey Amerika dışında, bu ünite, çıkış sınıflandırması bu sayfanın başında belirtilen IEC sertifikalı bir ITE güç kaynağı ile birlikte kullanılmak üzere tasarlanmıştır. (TR)

Updated 10/01/2001

Legend: Danish – DK; English – US; Finnish – FI; French- - FR; German – DE; Greek – GR; Italian – IT; Norwegian – NO; Portuguese – PT; Spanish – ES; Swedish – SE; Turkish – TR.

⚠ **Vehicle Power Supply Connection Safety Statement** ⚠

Vehicle Power Supply Connection:
If the supply connection is made directly to the battery, a 3A slow-blow fuse should be installed in the positive lead within 5 inches (12.7 cm.) of the battery positive (+) terminal. (US)

Raccordement de l'alimentation du véhicule
Si l'alimentation est raccordée directement à la batterie, un fusible à action retardée de 3A doit être installé sur le câble positif à moins de 12,7 cm de la borne positive (+) de la batterie. (FR)

EL forsyning af køretøjet.
Er forsyningsforbindelsen direkte tilknyttet til batteriet og og tilsluttet til den positive part indenfor 12,7 cm (+ delen). vil der være en langsom tændelse af 3 ampere. (DK)

Kytkentä ajoneuvon virtalähteeseen
Jos virtaa otetaan suoraan akusta, 3 ampeerin hidas sulake on asennettava positiiviseen johtoon enintään 12 cm:n etäisyydelle akun positiivisesta (+) navasta. (FI)

Anschluss an Fahrzeugbatterie
Bei direktem Anschluss an die Fahrzeugbatterie sollte eine träge 3A-Sicherung in die positive Leitung zwischengeschaltet werden, und zwar nicht weiter als ca. 13 cm von der positiven (+) Batterieklemme entfernt. (DE)

Σύνδεση Τροφοδοτικού Ισχύος Οχήματος
Αν η σύνδεση του τροφοδοτικού γίνει κατευθείαν στη μπαταρία, μια ασφάλεια βραδείας τήξης των 3A θα πρέπει να τοποθετηθεί στο θετικό καλώδιο εντός 5 ιντσών (12,7 εκ.) του θετικού (+) ακροδέκτη της μπαταρίας. (GR)

Collegamento dell'alimentazione del veicolo
Se il collegamento dell'alimentazione viene stabilito direttamente con la batteria, è necessario installare un fusibile ad azione lenta da 5 A nel conduttore positivo a meno di 3 in. (12,7 cm) dal terminale positivo (+) della batteria. (IT)

Tilkople strømforsyningen til kjøretøyet
Hvis strømforsyningen koples direkte til batteriet, skal det installeres en 3 A treg sikring i den positive ledningen innen 12,7 cm fra plusspolen (+) på batteriet. (NO)

Ligação do fornecimento de corrente do veículo
Se a ligação de fornecimento de corrente for ligada directamente à bateria, deve instalar-se um fusível de 3A no terminal positivo, a 12,7 cm. do terminal positivo (+) da bateria. (PT)

Conexión de suministro eléctrico para el vehículo
Si el suministro eléctrico se proporciona directamente a la batería, se debe instalar un fusible de retardo de 3 A en el conductor positivo, como máximo a 12,7 cm (5 pulgadas) del terminal positivo (+). (ES)

Fordonets strömförsörjningskoppling
Om strömkopplingen görs direkt till batteriet, måste en 3A-säkring installeras i den positivt laddade ledningen inom 12.7 cm från batteriets pluspol (+). (SE)

Taşıt Güç Kaynağı Bağlantısı
Kaynak bağlantısı doğrudan aküye yapılırsa, pozitif bağlantı kablosu üzerinde akünün pozitif (+) kutbuna 12.7 cm mesafede 3A'lık yavaş atan bir sigorta monte edilmelidir. (TR)

Legend: Danish – DK; English – US; Finnish – FI; French- - FR; German – DE; Greek – GR; Italian – IT;
            Norwegian – NO; Portuguese – PT; Spanish – ES; Swedish – SE; Turkish – TR.
Updated 10/01/2001